IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

APTIV TECHNOLOGIES AG,)
Plaintiff,)
v.) C.A. No. 23-307 (JDW)
MICROCHIP TECHNOLOGY INC.,) JURY TRIAL DEMANDED
Defendant.)

MICROCHIP TECHNOLOGY INC.'S ANSWER, AFFIRMATIVE DEFENSES, AND COUNTERCLAIMS TO APTIV TECHNOLOGIES AG'S SECOND AMENDED COMPLAINT

Microchip Technology Inc. ("Microchip") hereby submits its Answer to Plaintiff Aptiv Technologies AG ("Aptiv AG")'s Second Amended Complaint, Affirmative Defenses, and Counterclaims.¹ Unless specifically admitted, Microchip denies each and every allegation made by Aptiv AG in the Second Amended Complaint, and states as follows. For ease of reference, Microchip refers to Aptiv AG's headings and titles, but to the extent those headings and titles could be construed to contain factual allegations, those allegations are denied.

NATURE OF THE ACTION

1. Microchip admits that this is a civil action for patent infringement. Microchip admits that Aptiv AG alleges infringement of U.S. Patent Nos. 9,619,420 (the "'420 Patent"); 9,645,962 (the "'962 Patent"); 9,460,037 (the "'037 Patent"); 10,545,899 (the "'899 Patent"); 11,176,072 (the "'072 Patent"); and 11,681,643 (the "'643 Patent") (collectively, the "Aptiv Patents"). Microchip further admits that Exhibits A–E, and K purport to be copies of the Aptiv

Aptiv AG names "Microchip Technology, Inc." as the defendant in this matter. No such entity exists. Microchip assumes that Aptiv AG intended to refer to "Microchip Technology Inc." Microchip has corrected the caption and responds to Aptiv AG's Second Amended Complaint as if it had identified Microchip Technology Inc. as the defendant.

Patents. Microchip denies the remaining allegations of Paragraph 1 of the Second Amended Complaint and denies that Microchip has infringed the Aptiv Patents.

THE PARTIES

- 2. Microchip lacks knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 2 of the Second Amended Complaint and, on that basis, denies them.
- 3. Microchip admits that the original plaintiff in this action was Aptiv Technologies Limited ("Aptiv Technologies"). The remaining allegations of Paragraph 3 are legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip lacks knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 3 of the Second Amended Complaint and, on that basis, denies them.
- 4. Microchip lacks knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 4 of the Second Amended Complaint and, on that basis, denies them.
- 5. Microchip lacks knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 5 of the Second Amended Complaint and, on that basis, denies them.
- 6. Microchip admits that it is a Delaware corporation with a place of business located at 2355 West Chandler Blvd., Chandler, Arizona 85224-6199, and that it is a leading provider of integrated circuits. Microchip otherwise denies the allegations of Paragraph 6 of the Second Amended Complaint.

JURISDICTION AND VENUE

- 7. The allegations of Paragraph 7 are legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip will not contest subject matter jurisdiction for purposes of this action only.
- 8. Microchip denies committing any acts of infringement. Microchip admits that it filed a patent infringement action against an entity that later changed its name to Aptiv Services US, LLC ("Aptiv Services") (*Microchip Technology Inc. v. Aptiv Services US, LLC*, Case No. 17-cv-01194-JDW (D. Del.) (the "2017 Action")). For purposes of this case only, Microchip will not challenge personal jurisdiction or venue in the District of Delaware. The remaining allegations of Paragraph 8 are legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 8 of the Second Amended Complaint.

APTIV AG'S PATENTED TECHNOLOGY

- 9. Microchip admits that the Second Amended Complaint purports to relate to Apple CarPlay. Microchip admits that the website https://www.apple.com/ios/carplay states as of May 4, 2023 that CarPlay allows users to "get directions, make calls, send and receive messages, and enjoy your favorite music . . . [a]ll on your car's built-in display." Microchip lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 9 of the Second Amended Complaint and, on that basis, denies them.
- 10. Microchip admits that Apple publicly announced "iOS in the Car" at the Worldwide Developers Conference in 2013. Microchip admits that CarPlay related to a vehicle's built-in infotainment system, that Apple's Accessory Interface Specification related to certain CarPlay requirements, and that Apple had a certification process relating to CarPlay. Microchip lacks

knowledge or information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 10 of the Second Amended Complaint and, on that basis, denies them.

- 11. Microchip admits that CarPlay may employ USB technology. Microchip further admits that USB existed before CarPlay. Microchip further admits that there are various USB standards and that USB may connect a mouse to a laptop. Microchip denies the remaining allegations of Paragraph 11 of the Second Amended Complaint.
- 12. Microchip admits that a USB system may employ a hub, and that a hub may connect to devices such as a laptop, a flash drive, a mouse, or a printer. To the extent that Paragraph 12 of the Second Amended Complaint contains additional allegations, Microchip denies any such allegations.
- 13. Microchip lacks knowledge or information sufficient to form a belief as to the truth of the allegations regarding a "typical" vehicle infotainment system prior to CarPlay and, on that basis, denies them.
- 14. Microchip lacks knowledge or information sufficient to form a belief as to the truth of the allegations regarding a "typical" infotainment system prior to CarPlay and, on that basis, denies them.
- 15. Microchip admits that CarPlay required an iPhone to operate in host mode to a certain extent, at certain times. Microchip lacks knowledge or information sufficient to form as a belief as to how unspecified "auto manufacturers and their suppliers" responded to this alleged requirement or whether the head unit "typically" controlled devices and, on that basis, denies those allegations. Microchip denies the remaining allegations in Paragraph 15 of the Second Amended Complaint.

- 16. Microchip admits that Unwired Technology LLC ("Unwired") has purchased certain chips from Microchip. Microchip further admits that Unwired and Microchip had a business relationship. Microchip lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 16 of the Second Amended Complaint, including whether Aptiv AG, Aptiv Technologies, Aptiv Services, or other related entities acquired Unwired and, on that basis, denies them.
- 17. Microchip denies the allegations of Paragraph 17 of the Second Amended Complaint.
- 18. Microchip denies the allegations of Paragraph 18 of the Second Amended Complaint.
- 19. Microchip denies the allegations in the first sentence of Paragraph 18 of the Second Amended Complaint. The remaining allegations of Paragraph 19 of the Second Amended Complaint are legal conclusions regarding the scope of the Aptiv Patents and do not require a response. To the extent that any response to such allegations is required, Microchip denies the remaining allegations of Paragraph 19 of the Second Amended Complaint.
- 20. Microchip admits that Apple CarPlay is now available from multiple major auto manufacturers and in a number of vehicle models. Microchip lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 20 of the Second Amended Complaint and, on that basis, denies them.
- 21. Microchip admits that Exhibit I to the Second Amended Complaint includes the language quoted in Paragraph 21 of the Second Amended Complaint. Microchip lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 21 of the Second Amended Complaint and, on that basis, denies them.

MICROCHIP'S INFRINGING PRODUCTS

- 22. Microchip admits that certain of its personnel were aware, in or around 2014, that Unwired was developing a USB hub. Microchip further admits that it made FlexConnect available to its customers. Microchip denies the remaining allegations of Paragraph 22 of the Second Amended Complaint.
- 23. Microchip denies the allegations of Paragraph 23 of the Second Amended Complaint.
- 24. Microchip denies the allegations of Paragraph 24 of the Second Amended Complaint.
- 25. Microchip denies the allegations of Paragraph 25 of the Second Amended Complaint.
- Application No. 14/487,947 (the "'947 Application"), which published as Pub. No. 2015/0089092. Microchip admits that, based on the information stated on the faces of the Aptiv Patents, the '947 Application purports to have been the first to publish of the applications that led to the Aptiv Patents. Microchip admits that, based on the information stated on the faces of the Aptiv Patents, each of the other five Aptiv Patents purport to have issued from applications that were continuations (or continuations-in-part) of the '947 Application. The remaining allegations of Paragraph 26 of the Second Amended Complaint are legal conclusions regarding the scope of the Aptiv Patents and do not require a response. To the extent that any response to such allegations is required, Microchip denies the remaining allegations of Paragraph 26 of the Second Amended Complaint.

- 27. Microchip admits that it internally referred to certain products using the project name "Sandia." Microchip denies the remaining allegations of Paragraph 27 of the Second Amended Complaint.
- 28. Microchip denies the allegations of Paragraph 28 of the Second Amended Complaint.
- 29. Microchip admits that it has offered and/or continues to offer for sale the Sandia products, including USB4912, USB4914, and USB4916 (collectively, the "Accused Products"). Microchip denies the remaining allegations of Paragraph 29 of the Second Amended Complaint.

MICROCHIP'S HARMFUL ACTS

- 30. Microchip lacks knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 30 of the Second Amended Complaint and, on that basis, denies them.
- 31. Microchip admits that Unwired has purchased certain chips from Microchip and that Unwired and Microchip have negotiated over the price of certain of Microchip chips. Microchip lacks knowledge or information sufficient to form a belief as to the truth of the allegations regarding the purported contract between Unwired and General Motors and, on that basis, denies them. Microchip denies the remaining allegations of Paragraph 31 of the Second Amended Complaint.
- 32. Microchip lacks knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 32 and, on that basis, denies them.
- 33. Microchip lacks knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 33 of the Second Amended Complaint regarding automakers' interest in the Dual Role Hub or purported contracts, on that basis, denies them. Microchip denies the remaining allegations of Paragraph 33 of the Second Amended Complaint.

- 34. Microchip denies the allegations of Paragraph 34 of the Second Amended Complaint.
- 35. Microchip denies the allegations of Paragraph 35 of the Second Amended Complaint.
- 36. Microchip denies that the Sandia products infringe the Aptiv Patents. Microchip lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 36 of the Second Amended Complaint and, on that basis, denies them.
- 37. Microchip admits that it sells its Sandia products to certain car manufacturers. Microchip denies the remaining allegations of Paragraph 37 of the Second Amended Complaint.
- 38. Microchip denies the allegations of Paragraph 38 of the Second Amended Complaint.
- 39. Microchip lacks knowledge as to whether Microchip is the sole source of certain chips. Microchip denies the remaining allegations of Paragraph 39 of the Second Amended Complaint.

FIRST CAUSE OF ACTION

(INFRINGEMENT OF U.S. PATENT NO. 9,619,420)

- 40. Microchip repeats and incorporates by reference Paragraphs 9 through 39 above as though fully set forth herein.
- 41. Microchip denies the allegations of Paragraph 41 of the Second Amended Complaint.
- 42. Microchip admits that it offers to sell (through its website and its sales personnel) and sells certain of the Accused Products in the United States. Microchip further admits that it manufactures the Accused Products outside the United States. Microchip denies that it has manufactured prototypes of the Accused Products in the United States. The remaining allegations

of Paragraph 42 of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 42 of the Second Amended Complaint.

- 43. Microchip denies the allegations of Paragraph 43 of the Second Amended Complaint.
- 44. Microchip denies the allegations in the preamble of Paragraph 44 of the Second Amended Complaint.
 - a. Microchip admits that Exhibits F–H to the Second Amended Complaint show portions of Microchip's website, and use the phrase "highly integrated chip." The remaining allegations of Paragraph 44a of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 44a of the Second Amended Complaint.
 - b. Microchip admits that Exhibits F–H to the Second Amended Complaint show portions of Microchip's website, and use the phrases "is a USB2.0 Hi-Speed Hub," "[t]he multiple downstream USB ports support USB2.0 Low Speed/Full Speed/Hi-Speed with a single USB2.0 Hi-Speed upstream port for host connection," and "downstream ports with dual role (host/device) physical interfaces." Microchip admits that Exhibit J uses the phrase "automotive head unit (USB Host)." The remaining allegations of Paragraph 44b of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such

- allegations is required, Microchip denies the allegations of Paragraph 44b of the Second Amended Complaint.
- show portions of Microchip's website, and use the phrases "Multi-Host Endpoint Reflector" and "USB data is 'mirrored' between two USB hosts (Multi-Host) in order to execute USB transactions." The remaining allegations of Paragraph 44c of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 44c of the Second Amended Complaint.
- d. The allegations of Paragraph 44d of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 44d of the Second Amended Complaint.
- e. The allegations of Paragraph 44e of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 44e of the Second Amended Complaint.
- f. The allegations of Paragraph 44f of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 44f of the Second Amended Complaint.

- g. The allegations of Paragraph 44g of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 44g of the Second Amended Complaint.
- h. The allegations of Paragraph 44h of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 44h of the Second Amended Complaint.
- 45. Microchip denies the allegations of Paragraph 45 of the Second Amended Complaint.
- 46. Microchip denies the allegations of Paragraph 46 of the Second Amended Complaint.
- 47. Microchip denies the allegations of Paragraph 47 of the Second Amended Complaint.
- 48. Microchip admits that certain Microchip employees became aware of the '420 Patent in the 2017 Action, wherein the '420 Patent was an exhibit at trial. The allegation that the Dual Role Hub is an embodying product of the Aptiv Patents states a legal conclusion to which no response is required. To the extent that any response to such allegation is required, Microchip denies the allegation. Microchip denies the remaining allegations of Paragraph 48 of the Second Amended Complaint.
- 49. Microchip denies the allegations of Paragraph 49 of the Second Amended Complaint.

- 50. Microchip admits that Exhibits F–H to the Second Amended Complaint show portions of Microchip's website, and use the phrase "architectures for smart phones that require host / device swapping in order to set-up an automotive session, including graphic user interface, from the mobile device to the head unit display." The remaining allegations of Paragraph 50 of the Second Amended Complaint are legal conclusions that do not require a response. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 50 of the Second Amended Complaint.
- 51. Microchip denies the allegations of Paragraph 51 of the Second Amended Complaint.
- 52. Microchip admits that it manufactures certain of the Accused Products outside the United States, and that it sells certain of the Accused Products that are incorporated by third parties into vehicles that are ultimately offered for sale, sold, tested, or used in the United States. Microchip denies the remaining allegations of Paragraph 52 of the Second Amended Complaint.
- 53. Microchip denies the allegations of Paragraph 53 of the Second Amended Complaint.
- 54. Microchip denies the allegations of Paragraph 54 of the Second Amended Complaint.
- 55. Microchip denies the allegations of Paragraph 55 of the Second Amended Complaint.
- 56. Microchip denies the allegations of Paragraph 56 of the Second Amended Complaint.
- 57. The allegations of Paragraph 57 are legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip lacks

knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 57 of the Second Amended Complaint and, on that basis, denies them.

- 58. Microchip denies the allegations of Paragraph 58 of the Second Amended Complaint.
- 59. Microchip denies the allegations of Paragraph 59 of the Second Amended Complaint.
- 60. Microchip denies the allegations of Paragraph 60 of the Second Amended Complaint.

SECOND CAUSE OF ACTION

(INFRINGEMENT OF U.S. PATENT NO. 9,645,962)

- 61. Microchip repeats and incorporates by reference Paragraphs 9 through 60 above as though fully set forth herein.
- 62. Microchip denies the allegations of Paragraph 62 of the Second Amended Complaint.
- 63. Microchip denies the allegations of Paragraph 63 of the Second Amended Complaint.
- 64. Microchip admits that it offers to sell (through its website and its sales personnel) and sells certain of the Accused Products in the United States. Microchip further admits that it manufactures the Accused Products outside the United States. Microchip denies that it has manufactured prototypes of the Accused Products in the United States. The remaining allegations of Paragraph 64 of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 64 of the Second Amended Complaint.

- 65. Microchip denies the allegations in the preamble of Paragraph 65 of the Second Amended Complaint.
 - a. Microchip admits that Exhibits F–H to the Second Amended Complaint show portions of Microchip's website, and use the phrase "integrated chip." The remaining allegations of Paragraph 65a of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 65a of the Second Amended Complaint.
 - b. Microchip admits that Exhibits F–H to the Second Amended Complaint show portions of Microchip's website and use the phrases "a USB2.0 Hi-Speed Hub," "upstream port for host connection," and "multiple downstream USB ports." The remaining allegations of Paragraph 65b of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 65b of the Second Amended Complaint.
 - c. Microchip admits that Exhibits F–H to the Second Amended Complaint show portions of Microchip's website, and use the phrases "Multi-Host Endpoint Reflector" and "USB data is 'mirrored' between two USB hosts (Multi-Host) in order to execute USB transactions." The remaining allegations of Paragraph 65c of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any

- response to such allegations is required, Microchip denies the allegations of Paragraph 65c of the Second Amended Complaint.
- d. The allegations of Paragraph 65d of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 65d of the Second Amended Complaint.
- e. The allegations of Paragraph 65e of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 65e of the Second Amended Complaint.
- f. The allegations of Paragraph 65f of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 65f of the Second Amended Complaint.
- g. The allegations of Paragraph 65g of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 65g of the Second Amended Complaint.
- h. The allegations of Paragraph 65h of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 65h of the Second Amended Complaint.

- 66. Microchip denies the allegations of Paragraph 66 of the Second Amended Complaint.
- 67. Microchip denies the allegations of Paragraph 67 of the Second Amended Complaint.
- 68. Microchip denies the allegations of Paragraph 68 of the Second Amended Complaint.
- 69. Microchip admits that certain Microchip employees became aware of the '962 Patent in the 2017 Action wherein the '962 Patent was an exhibit at trial. The allegation that the Dual Role Hub is an embodying product of the Aptiv Patents states a legal conclusion to which no response is required. To the extent that any response to such allegation is required, Microchip denies the allegation. Microchip denies the remaining allegations of Paragraph 69 of the Second Amended Complaint.
- 70. Microchip denies the allegations of Paragraph 70 of the Second Amended Complaint.
- 71. Microchip admits that Exhibits F–H to the Second Amended Complaint show portions of Microchip's website, and use the phrase "architectures for smart phones that require host / device swapping in order to set-up an automotive session, including graphic user interface, from the mobile device to the head unit display." The remaining allegations of Paragraph 71 of the Second Amended Complaint are legal conclusions that do not require a response. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 71 of the Second Amended Complaint.
- 72. Microchip denies the allegations of Paragraph 72 of the Second Amended Complaint.

- 73. Microchip admits that it manufactures the Accused Products outside the United States, and that it sells certain of the Accused Products that are incorporated by third parties into vehicles that are ultimately offered for sale, sold, tested, or used in the United States. Microchip denies the remaining allegations of Paragraph 73 of the Second Amended Complaint.
- 74. Microchip denies the allegations of Paragraph 74 of the Second Amended Complaint.
- 75. Microchip denies the allegations of Paragraph 75 of the Second Amended Complaint.
- 76. Microchip denies the allegations of Paragraph 76 of the Second Amended Complaint.
- 77. Microchip denies the allegations of Paragraph 77 of the Second Amended Complaint.
- 78. The allegations of Paragraph 78 are legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip lacks knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 78 of the Second Amended Complaint and, on that basis, denies them.
- 79. Microchip denies the allegations of Paragraph 79 of the Second Amended Complaint.
- 80. Microchip denies the allegations of Paragraph 80 of the Second Amended Complaint.
- 81. Microchip denies the allegations of Paragraph 81 of the Second Amended Complaint.

THIRD CAUSE OF ACTION

(INFRINGEMENT OF U.S. PATENT NO. 9,460,037)

- 82. Microchip repeats and incorporates by reference Paragraphs 9 through 81 above as though fully set forth herein.
- 83. Microchip denies the allegations of Paragraph 83 of the Second Amended Complaint.
- 84. Microchip denies the allegations of Paragraph 84 of the Second Amended Complaint.
- 85. Microchip admits that it offers to sell (through its website and its sales personnel) and sells certain of the Accused Products in the United States. Microchip further admits that it manufactures the Accused Products outside the United States. Microchip denies that it has manufactured prototypes of the Accused Products in the United States. The remaining allegations of Paragraph 85 of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 85 of the Second Amended Complaint.
- 86. Microchip denies the allegations in the preamble of Paragraph 86 of the Second Amended Complaint.
 - a. Microchip admits that Exhibits F–H to the Second Amended Complaint show portions of Microchip's website, and use the phrases "USB2.0 Hi-Speed Automotive Hub," "Recommended for Automotive Design," "targeted to automotive consumer ports," "Target Applications," and "Embedded Automotive Systems." The remaining allegations of Paragraph 86a of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is

- required, Microchip denies the allegations of Paragraph 86a of the Second Amended Complaint.
- b. Microchip admits that Exhibit J uses the phrase "automotive head unit (USB Host)" and contains the figure reproduced in Paragraph 86b of the Second Amended Complaint. The remaining allegations of Paragraph 86b of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 86b of the Second Amended Complaint.
- c. Microchip admits that Exhibits F–H to the Second Amended Complaint show portions of the Accused Products' webpages and state that (1) each Accused Product "is a USB2.0 Hi-Speed Hub"; (2) "[t]he multiple downstream USB ports support USB2.0 Low Speed/Full Speed/Hi-Speed with a single USB2.0 Hi-Speed upstream port for host connection"; and (3) one of the product features is one, two, or four (depending on the product) "downstream ports with dual role (host/device) physical interfaces." The remaining allegations of Paragraph 86c of the Second Amended Complaint state legal conclusions to which no response is required.
- d. Microchip admits that Exhibits F–H to the Second Amended Complaint show portions of the Accused Products' webpages and state "The Multi-Host Endpoint Reflector employs patented technology such that USB data is 'mirrored' between two USB hosts (Multi-Host) in order to execute USB transactions." The remaining allegations of Paragraph 86d of the Second

- Amended Complaint state legal conclusions to which no response is required.
- e. The allegations of Paragraph 86e of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 86e of the Second Amended Complaint.
- f. The allegations of Paragraph 86f of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 86f of the Second Amended Complaint.
- g. The allegations of Paragraph 86g of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 86g of the Second Amended Complaint.
- h. The allegations of Paragraph 86h of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 86h of the Second Amended Complaint.
- 87. Microchip denies the allegations of Paragraph 87 of the Second Amended Complaint.
- 88. Microchip denies the allegations of Paragraph 88 of the Second Amended Complaint.

- 89. Microchip denies the allegations of Paragraph 89 of the Second Amended Complaint.
- 90. Microchip admits that certain Microchip employees became aware of the '037 Patent in the 2017 Action wherein the '037 Patent was an exhibit at trial. The allegation that the Dual Role Hub is an embodying product of the Aptiv Patents states a legal conclusion to which no response is required. To the extent that any response to such allegation is required, Microchip denies the allegation. Microchip denies the remaining allegations of Paragraph 90 of the Second Amended Complaint.
- 91. Microchip denies the allegations of Paragraph 91 of the Second Amended Complaint.
- 92. Microchip admits that Exhibits F–H to the Second Amended Complaint show Microchip's website, and use the phrase "architectures for smart phones that require host / device swapping in order to set-up an automotive session, including graphic user interface, from the mobile device to the head unit display." The remaining allegations of Paragraph 92 of the Second Amended Complaint are legal conclusions that do not require a response. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 92 of the Second Amended Complaint.
- 93. Microchip denies the allegations of Paragraph 93 of the Second Amended Complaint.
- 94. Microchip admits that it manufactures the Accused Products outside the United States, and that it sells certain of the Accused Products that are incorporated by third parties into vehicles that are ultimately offered for sale, sold, tested, or used in the United States. Microchip denies the remaining allegations of Paragraph 94 of the Second Amended Complaint.

- 95. Microchip denies the allegations of Paragraph 95 of the Second Amended Complaint.
- 96. Microchip denies the allegations of Paragraph 96 of the Second Amended Complaint.
- 97. Microchip denies the allegations of Paragraph 97 of the Second Amended Complaint.
- 98. Microchip denies the allegations of Paragraph 98 of the Second Amended Complaint.
- 99. The allegations of Paragraph 99 are legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip lacks knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 99 of the Second Amended Complaint and, on that basis, denies them.
- 100. Microchip denies the allegations of Paragraph 100 of the Second Amended Complaint.
- 101. Microchip denies the allegations of Paragraph 101 of the Second Amended Complaint.
- 102. Microchip denies the allegations of Paragraph 102 of the Second Amended Complaint.

FOURTH CAUSE OF ACTION

(INFRINGEMENT OF U.S. PATENT NO. 10,545,899)

- 103. Microchip repeats and incorporates by reference Paragraphs 9 through 102 above as though fully set forth herein.
- 104. Microchip denies the allegations of Paragraph 104 of the Second Amended Complaint.

- 105. Microchip denies the allegations of Paragraph 105 of the Second Amended Complaint.
- and sells certain of the Accused Products in the United States. Microchip further admits that it manufactures the Accused Products outside the United States. Microchip denies that it has manufactured prototypes of the Accused Products in the United States. The remaining allegations of Paragraph 106 of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 106 of the Second Amended Complaint.
- 107. Microchip denies the allegations in the preamble of Paragraph 107 of the Second Amended Complaint.
 - a. Microchip admits that Exhibits F–H to the Second Amended Complaint show portions of Microchip's website, and use the phrase "such that USB data is 'mirrored' between two USB hosts (Multi-Host) in order to execute USB transactions. This capability is fundamental in delivering architectures for smart phones that require host / device swapping in order to set-up an automotive session, including graphic user interface, from the mobile device to the head unit display." The remaining allegations of Paragraph 107a of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 107a of the Second Amended Complaint.

- b. Microchip admits that Exhibits F–H to the Second Amended Complaint show portions of Microchip's website, and use the phrases "a USB2.0 Hi-Speed Hub," "upstream port for host connection," and "multiple downstream USB ports." The remaining allegations of Paragraph 107b of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 107b of the Second Amended Complaint.
- c. Microchip admits that Exhibits F–H to the Second Amended Complaint show portions of Microchip's website, and use the phrases "Multi-Host Endpoint Reflector" and "USB data is 'mirrored' between two USB hosts (Multi-Host) in order to execute USB transactions." The remaining allegations of Paragraph 107c of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 107c of the Second Amended Complaint.
- d. The allegations of Paragraph 107d of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 107d of the Second Amended Complaint.
- e. The allegations of Paragraph 107e of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any

- response to such allegations is required, Microchip denies the allegations of Paragraph 107e of the Second Amended Complaint.
- f. The allegations of Paragraph 107f of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 107f of the Second Amended Complaint.
- g. The allegations of Paragraph 107g of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 107g of the Second Amended Complaint.
- 108. Microchip denies the allegations of Paragraph 108 of the Second Amended Complaint.
- 109. Microchip denies the allegations of Paragraph 109 of the Second Amended Complaint.
- 110. Microchip denies the allegations of Paragraph 110 of the Second Amended Complaint.
- Patent in the 2017 Action wherein the '899 Patent was an exhibit at trial. The allegation that the Dual Role Hub is an embodying product of the Aptiv Patents states a legal conclusion to which no response is required. To the extent that any response to such allegation is required, Microchip denies the allegation. Microchip denies the remaining allegations of Paragraph 111 of the Second Amended Complaint.

- 112. Microchip denies the allegations of Paragraph 112 of the Second Amended Complaint.
- 113. Microchip admits that Exhibits F–H to the Second Amended Complaint show portions of Microchip's website, and use the phrase "architectures for smart phones that require host / device swapping in order to set-up an automotive session, including graphic user interface, from the mobile device to the head unit display." The remaining allegations of Paragraph 113 of the Second Amended Complaint are legal conclusions that do not require a response. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 113 of the Second Amended Complaint.
- 114. Microchip denies the allegations of Paragraph 114 of the Second Amended Complaint.
- 115. Microchip admits that it manufactures the Accused Products outside the United States, and that it sells certain of the Accused Products that are incorporated by third parties into vehicles that are ultimately offered for sale, sold, tested, or used in the United States. Microchip denies the remaining allegations of Paragraph 115 of the Second Amended Complaint.
- 116. Microchip denies the allegations of Paragraph 116 of the Second Amended Complaint.
- 117. Microchip denies the allegations of Paragraph 117 of the Second Amended Complaint.
- 118. Microchip denies the allegations of Paragraph 118 of the Second Amended Complaint.
- 119. Microchip denies the allegations of Paragraph 119 of the Second Amended Complaint.

- 120. The allegations of Paragraph 120 are legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip lacks knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 120 of the Second Amended Complaint and, on that basis, denies them.
- 121. Microchip denies the allegations of Paragraph 121 of the Second Amended Complaint.
- 122. Microchip denies the allegations of Paragraph 122 of the Second Amended Complaint.
- 123. Microchip denies the allegations of Paragraph 123 of the Second Amended Complaint.

FIFTH CAUSE OF ACTION

(INFRINGEMENT OF U.S. PATENT NO. 11,176,072)

- 124. Microchip repeats and incorporates by reference Paragraphs 9 through 123 above as though fully set forth herein.
- 125. Microchip denies the allegations of Paragraph 125 of the Second Amended Complaint.
- 126. Microchip denies the allegations of Paragraph 126 of the Second Amended Complaint.
- 127. Microchip admits that it offers to sell (through its website and its sales personnel) and sells certain of the Accused Products in the United States. Microchip further admits that it manufactures the Accused Products outside the United States. Microchip denies that it has manufactured prototypes of the Accused Products in the United States. The remaining allegations of Paragraph 127 of the Second Amended Complaint state legal conclusions to which no response

is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 127 of the Second Amended Complaint.

- 128. Microchip denies the allegations in the preamble of Paragraph 128 of the Second Amended Complaint.
 - a. Microchip admits that Exhibits F–H to the Second Amended Complaint show portions of Microchip's website, and use the phrases "USB2.0 Hi-Speed Hub," "upstream port for host connection," "with dual role (host/device) physical interfaces," "Multi-Host Endpoint Reflector," and "USB data is 'mirrored' between two USB hosts (Multi-Host) in order to execute USB transactions." Microchip admits that Exhibit J uses the phrase "automotive head unit (USB Host)." The remaining allegations of Paragraph 128a of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 128a of the Second Amended Complaint.
 - b. The allegations of Paragraph 128b of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 128b of the Second Amended Complaint.
 - c. The allegations of Paragraph 128c of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 128c of the Second Amended Complaint.

- d. The allegations of Paragraph 128d of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 128d of the Second Amended Complaint.
- e. The allegations of Paragraph 128e of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 128e of the Second Amended Complaint.
- f. The allegations of Paragraph 128f of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 128f of the Second Amended Complaint.
- 129. Microchip denies the allegations of Paragraph 129 of the Second Amended Complaint.
- 130. Microchip denies the allegations of Paragraph 130 of the Second Amended Complaint.
- 131. Microchip denies the allegations of Paragraph 131 of the Second Amended Complaint.
- 132. Microchip admits that certain Microchip employees became aware of the '072 Patent in the 2017 Action wherein the '072 Patent was an exhibit at trial. The allegation that the Dual Role Hub is an embodying product of the Aptiv Patents states a legal conclusion to which no response is required. To the extent that any response to such allegation is required, Microchip

denies the allegation. Microchip denies the remaining allegations of Paragraph 132 of the Second Amended Complaint.

- 133. Microchip denies the allegations of Paragraph 133 of the Second Amended Complaint.
- 134. Microchip admits that Exhibits F–H to the Second Amended Complaint show portions of Microchip's website, and use the phrase "architectures for smart phones that require host / device swapping in order to set-up an automotive session, including graphic user interface, from the mobile device to the head unit display." The remaining allegations of Paragraph 134 of the Second Amended Complaint are legal conclusions that do not require a response. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 134 of the Second Amended Complaint.
- 135. Microchip denies the allegations of Paragraph 135 of the Second Amended Complaint.
- 136. Microchip admits that it manufactures the Accused Products primarily outside the United States, and that it sells certain of the Accused Products that are incorporated by third parties into vehicles that are ultimately offered for sale, sold, tested, or used in the United States. Microchip denies the remaining allegations of Paragraph 136 of the Second Amended Complaint.
- 137. Microchip denies the allegations of Paragraph 137 of the Second Amended Complaint.
- 138. Microchip denies the allegations of Paragraph 138 of the Second Amended Complaint.
- 139. Microchip denies the allegations of Paragraph 139 of the Second Amended Complaint.

- 140. Microchip denies the allegations of Paragraph 140 of the Second Amended Complaint.
- 141. The allegations of Paragraph 141 are legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip lacks knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 141 of the Second Amended Complaint and, on that basis, denies them.
- 142. Microchip denies the allegations of Paragraph 142 of the Second Amended Complaint.
- 143. Microchip denies the allegations of Paragraph 143 of the Second Amended Complaint.
- 144. Microchip denies the allegations of Paragraph 144 of the Second Amended Complaint.

SIXTH CAUSE OF ACTION

(INFRINGEMENT OF U.S. PATENT NO. 11,681,643)

- 145. Microchip repeats and incorporates by reference Paragraphs 9 through 144 above as though fully set forth herein.
- 146. Microchip denies the allegations of Paragraph 146 of the Second Amended Complaint.
- 147. Microchip denies the allegations of Paragraph 147 of the Second Amended Complaint.
- 148. Microchip admits that it offers to sell (through its website and its sales personnel) and sells certain of the Accused Products in the United States. Microchip further admits that it manufactures the Accused Products outside the United States. Microchip denies that it has manufactured prototypes of the Accused Products in the United States. The remaining allegations

of Paragraph 148 of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 148 of the Second Amended Complaint.

- 149. Microchip denies the allegations in the preamble of Paragraph 149 of the Second Amended Complaint.
 - a. Microchip admits that Exhibits F–H to the Second Amended Complaint show portions of Microchip's website, and use the phrases "USB2.0 Hi-Speed Hub," "upstream port for host connection," and "with dual role (host/device) physical interfaces." The remaining allegations of Paragraph 149a of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the remaining allegations of Paragraph 149a of the Second Amended Complaint.
 - b. The allegations of Paragraph 149b of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 149b of the Second Amended Complaint.
 - c. The allegations of Paragraph 149c of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 149c of the Second Amended Complaint.
 - d. The allegations of Paragraph 149d of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any

- response to such allegations is required, Microchip denies the allegations of Paragraph 149d of the Second Amended Complaint.
- e. Microchip admits that Exhibit J uses the phrase "enumerates a smartphone on Multi-Host capable port 'X' and recognizes that it is capable of an automotive session." The remaining allegations of Paragraph 149e of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the remaining allegations of Paragraph 149e of the Second Amended Complaint.
- f. Microchip admits that Exhibits F–H to the Second Amended Complaint show portions of Microchip's website, and use the phrases "Multi-Host Endpoint Reflector" and "USB data is 'mirrored' between two USB hosts (Multi-Host) in order to execute USB transactions." The remaining allegations of Paragraph 149f of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the remaining allegations of Paragraph 149f of the Second Amended Complaint.
- g. The allegations of Paragraph 149g of the Second Amended Complaint state legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 149g of the Second Amended Complaint.
- 150. Microchip denies the allegations of Paragraph 150 of the Second Amended Complaint.

- 151. Microchip admits that it has known of the '643 Patent since the time it issued on June 20, 2023. Microchip denies the remaining allegations of Paragraph 151 of the Second Amended Complaint.
- 152. Microchip denies the allegations of Paragraph 152 of the Second Amended Complaint.
- 153. Microchip denies the allegations of Paragraph 153 of the Second Amended Complaint.
- 154. Microchip denies the allegations of Paragraph 154 of the Second Amended Complaint.
- 155. Microchip admits that Exhibits F–H to the Second Amended Complaint show portions of Microchip's website, and use the phrase "architectures for smart phones that require host / device swapping in order to set-up an automotive session, including graphic user interface, from the mobile device to the head unit display." The remaining allegations of Paragraph 155 of the Second Amended Complaint are legal conclusions that do not require a response. To the extent that any response to such allegations is required, Microchip denies the allegations of Paragraph 155 of the Second Amended Complaint.
- 156. Microchip denies the allegations of Paragraph 156 of the Second Amended Complaint.
- 157. Microchip admits that it manufactures the Accused Products primarily outside the United States, and that it sells certain of the Accused Products that are incorporated by third parties into vehicles that are ultimately offered for sale, sold, tested, or used in the United States. Microchip denies the remaining allegations of Paragraph 157 of the Second Amended Complaint.

- 158. Microchip denies the allegations of Paragraph 158 of the Second Amended Complaint.
- 159. Microchip denies the allegations of Paragraph 159 of the Second Amended Complaint.
- 160. Microchip denies the allegations of Paragraph 160 of the Second Amended Complaint.
- 161. Microchip denies the allegations of Paragraph 161 of the Second Amended Complaint.
- 162. The allegations of Paragraph 162 are legal conclusions to which no response is required. To the extent that any response to such allegations is required, Microchip lacks knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 162 of the Second Amended Complaint and, on that basis, denies them.
- 163. Microchip denies the allegations of Paragraph 163 of the Second Amended Complaint.
- 164. Microchip denies the allegations of Paragraph 164 of the Second Amended Complaint.
- 165. Microchip denies the allegations of Paragraph 165 of the Second Amended Complaint.

APTIV AG'S PRAYER FOR RELIEF

The Second Amended Complaint recites a prayer for relief to which no response is required. To the extent a response is required, Microchip denies that Aptiv AG is entitled to any relief whatsoever in this action, either as requested in the Second Amended Complaint or otherwise.

GENERAL DENIAL

Except as specifically admitted herein, Microchip denies the remaining allegations in the Second Amended Complaint.

AFFIRMATIVE DEFENSES

Under Federal Rule of Civil Procedure 8(c), and without altering any applicable burdens of proof, Microchip asserts the following defenses to the Second Amended Complaint and reserves the right to assert additional defenses.

FIRST AFFIRMATIVE DEFENSE – FAILURE TO STATE A CLAIM

The Second Amended Complaint fails to state a claim upon which relief can be granted.

SECOND AFFIRMATIVE DEFENSE – NON-INFRINGEMENT

Microchip has not infringed and does not infringe, directly or indirectly, contributorily or by inducement, any valid and enforceable claim of the Aptiv Patents either literally or under the doctrine of equivalents. Microchip incorporates by reference Counterclaim Paragraphs 10-14, 20-24, 30-34, 40-44, 50-54, and 60-64 below.

THIRD AFFIRMATIVE DEFENSE – INVALIDITY

Claims of the Aptiv Patents are invalid for failure to satisfy the conditions of patentability set forth in 35 U.S.C. § 101, *et seq.*, including, but not limited to, §§ 101, 102, 103, and 112. Microchip incorporates by reference Counterclaim Paragraphs 15-19, 25-29, 35-39, 45-49, 55-59, and 65-69 below.

FOURTH AFFIRMATIVE DEFENSE – PROSECUTION HISTORY ESTOPPEL

Aptiv AG's claims are estopped, based on statements, representations, and admissions made in the specification of the patent applications, made during prosecution of the patents applications that led to the Aptiv Patents, and/or made during prosecution of related applications, from asserting that the claims of the Aptiv Patents are infringed by Microchip, or by Microchip's

products or services, either directly, indirectly, contributorily, through the doctrine of equivalents, or otherwise.

As one example, Aptiv contends that a USB bridge and/or USB routing switch is (inter)connected to a USB hub under the doctrine of equivalents even if the former shares components with the latter. *See, e.g.*, 11/8/23 Aptiv Infringement Contentions, Ex. A, 40–41. Aptiv is estopped from so contending under prosecution history estoppel. For instance, during prosecution of the '037 patent, Aptiv distinguished prior art because "the hub controller 203 [USB bridge] and the downstream switching logic 201 [USB routing switch] are components of the USB switching hub 119 [USB hub], rather than separate elements." '037 patent, 04/11/2016 Response After Final Action, 5. Aptiv "submit[ted] that it is not logical that the [USB bridge] and [USB routing switch] can be components of the USB [hub] that are contained within USB [hub] and at the very same time be interconnected to the same USB [hub]."

FIFTH AFFIRMATIVE DEFENSE - EQUITABLE DEFENSES

Aptiv AG's claims are barred as unenforceable, in whole or in part, under the doctrines of estoppel, acquiescence, waiver, implied license, and/or other equitable defenses. For example, Aptiv Technologies brought this action in retaliation for Microchip asserting its patents against Aptiv Services in the 2017 Action. Further, in connection with settlement negotiations in the 2017 Action in December 2021, Aptiv Services sent Microchip portions of a draft International Trade Commission ("ITC") complaint, in which Aptiv Services alleged that Microchip infringed the first five Aptiv Patents. Aptiv Services claimed that, if the parties were unable to achieve a settlement, it intended to initiate an action with the ITC based on Microchip's alleged infringement of Aptiv AG's patents. But the Aptiv entities never filed that ITC action, and Aptiv Technologies delayed almost a year and a half before it filed this suit.

SIXTH AFFIRMATIVE DEFENSE – NO WILLFULNESS

Microchip has not engaged in any conduct that constitutes willful infringement or that would otherwise entitle Aptiv AG to an award of enhanced damages under 35 U.S.C. § 284. Microchip does not, did not, and could not believe that it infringes any valid and enforceable claim of the Aptiv Patents either literally or under the doctrine of equivalents.

SEVENTH AFFIRMATIVE DEFENSE – LIMITATION ON DAMAGES

Aptiv AG is barred or limited in recovery, in whole or in part, by failing to meet the requirements of 35 U.S.C. §§ 287 and/or 288. For example, Aptiv AG is barred or limited in recovery, in whole or in part, by failing to meet the requirements of 35 U.S.C. § 287(a) due to Aptiv Services' failure to mark products embodying the Aptiv Patents.

EIGHTH AFFIRMATIVE DEFENSE – NO ATTORNEYS' FEES

Microchip has not engaged in any conduct that would make this an exceptional case or would entitle Aptiv AG to an award of attorneys' fees under 35 U.S.C. § 285.

NINTH AFFIRMATIVE DEFENSE – STATUTE OF LIMITATIONS

Aptiv AG is precluded from recovering any damages for any alleged infringement that occurred more than six years prior to the commencement of this action under 35 U.S.C. § 286.

TENTH AFFIRMATIVE DEFENSE – NO INJUNCTIVE RELIEF

No injunctive relief should be awarded because Aptiv AG cannot establish entitlement to such relief, and no factor supporting issuance of such relief is present in this case.

ELEVENTH AFFIRMATIVE DEFENSE – REVERSE DOCTRINE OF EQUIVALENTS

Microchip's accused methods, systems, products, and/or features operate and/or are configured in ways substantially different in principle from the purported invention(s) described in the Aptiv Patents, and Aptiv AG cannot sustain its burden of proving otherwise.

ADDITIONAL DEFENSES

Microchip's investigation of its defenses is ongoing, and Microchip expressly reserves the right to allege and assert any additional defenses under Rule 8 of the Federal Rules of Civil Procedure, the patent laws of the United States, and any other defense, at law or inequity, that may now exist or may in the future be available based upon discovery and further investigation in this case.

JURY DEMAND

Microchip joins Aptiv AG's request for a jury trial on all issues triable by jury.

MICROCHIP'S COUNTERCLAIMS

Under Federal Rule of Civil Procedure 13, Microchip Technology Inc. ("Microchip") submits the following counterclaims against Aptiv Technologies AG ("Aptiv AG"), and in support thereof, alleges the following:

NATURE OF THE ACTION

1. Microchip brings the counterclaims that follow for judgment of non-infringement and invalidity of U.S. Patent Nos. 9,619,420 (the "'420 Patent"); 9,645,962 (the "'962 Patent"); 9,460,037 (the "'037 Patent"); 10,545,899 (the "'899 Patent"); 11,176,072 (the "'072 Patent"); and 11,681,643 (the "'643 Patent") (collectively, the "Aptiv Patents") under the Patent Laws of the United States of America, 35 U.S.C. § 100, et seq.

THE PARTIES

- 2. Microchip Technology Inc. is a Delaware corporation with a place of business located at 2355 West Chandler Blvd., Chandler, Arizona 85224-6199.
- 3. Aptiv Technologies AG claims to be a Swiss international business company with a principal place of business at Pestalozzistrasse 2, 8200 Schafhausen, Switzerland. Aptiv Technologies AG claims to be the sole owner of the Aptiv Patents.

JURISDICTION AND VENUE

- 4. This Court has exclusive subject matter jurisdiction over this action pursuant to federal question jurisdiction, 28 U.S.C. §§ 1331 and 1338(a), the Declaratory Judgment Act, 28 U.S.C. §§ 2201-02, and the Patent Laws of the United States, 35 U.S.C. § 1, et seq. Furthermore, an actual, substantial, and continuing justiciable controversy exists between Microchip and Aptiv AG based on Aptiv AG having filed the Second Amended Complaint against Microchip alleging infringement of the Aptiv Patents, with respect to which Microchip requires a declaration of its rights by this Court. The controversy concerns the invalidity and non-infringement of the Aptiv Patents, and the right of Aptiv AG to maintain suit for alleged infringement of the Aptiv Patents.
- 5. The Court has personal jurisdiction over Aptiv AG, *inter alia*, because Aptiv AG has submitted to the personal jurisdiction of this Court by availing itself of this Court by filing the Second Amended Complaint.
- 6. Venue is proper in this District as to these counterclaims pursuant to 28 U.S.C. §§ 1391(b)-(c) and 1400(b) because, *inter alia*, Aptiv AG has submitted to the venue of this Court by filing its Second Amended Complaint here.

FACTUAL BACKGROUND

7. Aptiv Technologies filed its Complaint in this action in the District of Delaware on March 20, 2023, accusing Microchip of direct, indirect, and willful infringement of five of the Aptiv Patents (excluding the '643 Patent) by Microchip's Sandia products—including USB4912, USB4914, and USB4916 (collectively, the "Microchip Accused Products"). In its June 23, 2023 Amended Complaint, Aptiv Technologies added the '643 Patent. All of the Aptiv Patents claim priority to the provisional application No. 61/882,915, filed on September 26, 2013 by Unwired

Technology LLC ("Unwired") before it was acquired by an Aptiv entity. Aptiv Technologies claimed that the Dual Role Hub product is an embodiment of those patents.

- 8. On November 8, 2023, the Court granted the parties' stipulation requesting that Aptiv AG shall be substituted in place of Aptiv Technologies as the Plaintiff. (D.I. 99.)
- 9. As further detailed below, Microchip does not infringe any claim of any of the Aptiv Patents, and the Aptiv Patents are invalid.

FIRST COUNTERCLAIM

(DECLARATORY JUDGMENT OF NON-INFRINGEMENT) U.S. Patent No. 9,619,420

- 10. Microchip repeats and incorporates by reference Paragraphs 1 through 9 above as though fully set forth herein.
- 11. As a result of at least the allegations contained in the Second Amended Complaint, an actual and justiciable controversy exists between Microchip and Aptiv AG concerning the infringement of the '420 Patent. In particular, Aptiv AG alleges that Microchip infringes the '420 Patent.
- 12. Microchip has not directly infringed, contributed to, or induced infringement of any valid or enforceable claim of the '420 Patent and has not otherwise committed any acts in violation of 35 U.S.C. § 271.
- 13. For example, the Microchip Accused Products do not contain "a USB routing switch interconnected to the USB bridge, the USB hub, and the second USB port, wherein the USB routing switch is configured to connect the second USB port to the first USB port through the USB bridge, thereby providing bidirectional initiation of communication between the USB host and the consumer device when the consumer device connected to the second USB port is in a USB host mode and wherein the USB routing switch is configured to connect the second USB port

directly to the first USB port through the USB hub, thereby only responding to communication initiated by the USB Host when the consumer device connected to the second USB port is in a USB device mode."

14. Microchip therefore seeks a declaration that it has not infringed, and does not infringe, literally or under the doctrine of equivalents, directly or indirectly, any valid and enforceable claim of the '420 Patent.

SECOND COUNTERCLAIM

(DECLARATORY JUDGMENT OF INVALIDITY) U.S. Patent No. 9,619,420

- 15. Microchip repeats and incorporates by reference Paragraphs 1 through 14 above as though fully set forth herein.
- 16. As a result of at least the allegations contained in the Second Amended Complaint, an actual and justiciable controversy exists between Microchip and Aptiv AG concerning the validity of the '420 Patent. In particular, Aptiv AG alleges that Microchip infringes at least one valid claim of the '420 Patent.
- 17. One or more of the claims of the '420 Patent are invalid for failing to meet the conditions for patentability as set forth in 35 U.S.C. § 1, *et seq.*, including, but not limited to, §§ 101, 102, 103, and 112.
- 18. For example, Bohm (U.S. Patent No. 7,478,191), Chang (U.S. Patent Application Publication No. US2006/0206650), Chang (U.S. Patent Application Publication Publication Publication Publication No. JP2010093437), and/or Yamada (Japanese Patent Application Publication No. JP2010093437), alone or in combination with each other, invalidate one or more claims of the '420 Patent, at least under Aptiv AG's apparent construction of the asserted claims.

19. Microchip therefore seeks a declaration that one or more of the claims of the '420 Patent are invalid for failing to meet the conditions for patentability as set forth in 35 U.S.C.§ 1, et seq.

THIRD COUNTERCLAIM

(DECLARATORY JUDGMENT OF NON-INFRINGEMENT) U.S. Patent No. 9,645,962

- 20. Microchip repeats and incorporates by reference Paragraphs 1 through 19 above as though fully set forth herein.
- 21. As a result of at least the allegations contained in the Second Amended Complaint, an actual and justiciable controversy exists between Microchip and Aptiv AG concerning the infringement of the '962 Patent. In particular, Aptiv AG alleges that Microchip infringes the '962 Patent.
- 22. Microchip has not directly infringed, contributed to, or induced infringement of any valid or enforceable claim of the '962 Patent and has not otherwise committed any acts in violation of 35 U.S.C. § 271.
- 23. For example, the Microchip Accused Products do not contain "a USB routing switch interconnected to the USB bridge, the USB hub, and the plurality of downstream USB ports, wherein the USB routing switch is configured to connect a first downstream USB port of the plurality of downstream USB ports to the upstream USB port through the USB bridge when a consumer device connected to the first downstream USB port is the USB host and is configured to initiate bidirectional communication with the upstream USB port, and wherein the USB routing switch is configured to connect the first downstream USB port directly to the USB hub when the consumer device connected to the first downstream USB port is configured to only respond to

communication from the upstream USB port, thereby rendering the consumer device compatible with a device connected to the upstream USB port."

24. Microchip therefore seeks a declaration that it has not infringed, and does not infringe, literally or under the doctrine of equivalents, directly or indirectly, any valid and enforceable claim of the '962 Patent.

FOURTH COUNTERCLAIM

(DECLARATORY JUDGMENT OF INVALIDITY) U.S. Patent No. 9,645,962

- 25. Microchip repeats and incorporates by reference Paragraphs 1 through 24 above as though fully set forth herein.
- 26. As a result of at least the allegations contained in the Second Amended Complaint, an actual and justiciable controversy exists between Microchip and Aptiv AG concerning the validity of the '962 Patent. In particular, Aptiv AG alleges that Microchip infringes at least one valid claim of the '962 Patent.
- 27. One or more of the claims of the '962 Patent are invalid for failing to meet the conditions for patentability as set forth in 35 U.S.C. § 1, *et seq.*, including, but not limited to, §§ 101, 102, 103, and 112.
- 28. For example, Bohm (U.S. Patent No. 7,478,191), Chang (U.S. Patent Application Publication No. US2006/0206650), Chang (U.S. Patent Application Publication Publication US2009/0268743), and/or Yamada (Japanese Patent Application Publication No. JP2010093437), alone or in combination with each other, invalidate one or more claims of the '962 Patent, at least under Aptiv AG's apparent construction of the asserted claims.

29. Microchip therefore seeks a declaration that one or more of the claims of the '962 Patent are invalid for failing to meet the conditions for patentability as set forth in 35 U.S.C. § 1, et seq.

FIFTH COUNTERCLAIM

(DECLARATORY JUDGMENT OF NON-INFRINGEMENT) U.S. Patent No. 9,460,037

- 30. Microchip repeats and incorporates by reference Paragraphs 1 through 29 above as though fully set forth herein.
- 31. As a result of at least the allegations contained in the Second Amended Complaint, an actual and justiciable controversy exists between Microchip and Aptiv AG concerning the infringement of the '037 Patent. In particular, Aptiv AG alleges that Microchip infringes the '037 Patent.
- 32. Microchip has not directly infringed, contributed to, or induced infringement of any valid or enforceable claim of the '037 Patent and has not otherwise committed any acts in violation of 35 U.S.C. § 271.
- 33. For example, the Microchip Accused Products do not contain "a USB Bridge interconnected to the USB Hub and configured to connect the embedded USB Host system to a second USB Host; and a USB routing switch interconnected to the USB Bridge, the USB Hub, and the plurality of USB Ports, wherein the USB routing switch is configured to connect a first USB Port of the plurality of USB Ports to the USB Hub through the USB Bridge when a consumer device connected to the USB Port is the second USB Host and is configured to initiate bidirectional communication with the embedded USB Host, and wherein the USB routing switch is configured to connect the first USB Port directly to the USB Hub when the consumer device connected to the

first USB Port is configured to only respond to communication from the embedded USB Host, thereby rendering the consumer device compatible with the embedded USB Host system."

34. Microchip therefore seeks a declaration that it has not infringed, and does not infringe, literally or under the doctrine of equivalents, directly or indirectly, any valid and enforceable claim of the '037 Patent.

SIXTH COUNTERCLAIM

(DECLARATORY JUDGMENT OF INVALIDITY) U.S. Patent No. 9,460,037

- 35. Microchip repeats and incorporates by reference Paragraphs 1 through 34 above as though fully set forth herein.
- 36. As a result of at least the allegations contained in the Second Amended Complaint, an actual and justiciable controversy exists between Microchip and Aptiv AG concerning the validity of the '037 Patent. In particular, Aptiv AG alleges that Microchip infringes at least one valid claim of the '037 Patent.
- 37. One or more of the claims of the '037 Patent are invalid for failing to meet the conditions for patentability as set forth in 35 U.S.C. § 1, *et seq.*, including, but not limited to, §§ 101, 102, 103, and 112.
- 38. For example, Bohm (U.S. Patent No. 7,478,191), Chang (U.S. Patent Application Publication No. US2006/0206650), Chang (U.S. Patent Application Publication US2009/0268743), and/or Yamada (Japanese Patent Application Publication No. JP2010093437), alone or in combination with each other, invalidate one or more claims of the '037 Patent, at least under Aptiv AG's apparent construction of the asserted claims.

39. Microchip therefore seeks a declaration that one or more of the claims of the '037 Patent are invalid for failing to meet the conditions for patentability as set forth in 35 U.S.C. § 1, et seq.

SEVENTH COUNTERCLAIM

(DECLARATORY JUDGMENT OF NON-INFRINGEMENT) U.S. Patent No. 10,545,899

- 40. Microchip repeats and incorporates by reference Paragraphs 1 through 39 above as though fully set forth herein.
- 41. As a result of at least the allegations contained in the Second Amended Complaint, an actual and justiciable controversy exists between Microchip and Aptiv AG concerning the infringement of the '899 Patent. In particular, Aptiv AG alleges that Microchip infringes the '899 Patent.
- 42. Microchip has not directly infringed, contributed to, or induced infringement of any valid or enforceable claim of the '899 Patent and has not otherwise committed any acts in violation of 35 U.S.C. § 271.
- 43. For example, the Microchip Accused Products do not "automatically configure[e] the USB routing switch to initiate bidirectional communication with the USB host, wherein the USB routing switch is configured to connect the first USB port directly to the USB hub when the consumer device connected to the first USB port is configured to only respond to communication from the USB host, thereby rendering the consumer device compatible with the USB host."
- 44. Microchip therefore seeks a declaration that it has not infringed, and does not infringe, literally or under the doctrine of equivalents, directly or indirectly, any valid and enforceable claim of the '899 Patent.

EIGHTH COUNTERCLAIM

(DECLARATORY JUDGMENT OF INVALIDITY) U.S. Patent No. 10,545,899

- 45. Microchip repeats and incorporates by reference Paragraphs 1 through 44 above as though fully set forth herein.
- 46. As a result of at least the allegations contained in the Second Amended Complaint, an actual and justiciable controversy exists between Microchip and Aptiv AG concerning the validity of the '899 Patent. In particular, Aptiv AG alleges that Microchip infringes at least one valid claim of the '899 Patent.
- 47. One or more of the claims of the '899 Patent are invalid for failing to meet the conditions for patentability as set forth in 35 U.S.C. § 1, *et seq.*, including, but not limited to, §§ 101, 102, 103, and 112.
- 48. For example, Bohm (U.S. Patent No. 7,478,191), Chang (U.S. Patent Application Publication No. US2006/0206650), Chang (U.S. Patent Application Publication US2009/0268743), and/or Yamada (Japanese Patent Application Publication No. JP2010093437), alone or in combination with each other, invalidate one or more claims of the '899 Patent, at least under Aptiv AG's apparent construction of the asserted claims.
- 49. Microchip therefore seeks a declaration that one or more of the claims of the '899 Patent are invalid for failing to meet the conditions for patentability as set forth in 35 U.S.C. § 1, et seq.

NINTH COUNTERCLAIM

(DECLARATORY JUDGMENT OF NON-INFRINGEMENT) U.S. Patent No. 11,176,072

50. Microchip repeats and incorporates by reference Paragraphs 1 through 49 above as though fully set forth herein.

- 51. As a result of at least the allegations contained in the Second Amended Complaint, an actual and justiciable controversy exists between Microchip and Aptiv AG concerning the infringement of the '072 Patent. In particular, Aptiv AG alleges that Microchip infringes the '072 Patent.
- 52. Microchip has not directly infringed, contributed to, or induced infringement of any valid or enforceable claim of the '072 Patent and has not otherwise committed any acts in violation of 35 U.S.C. § 271.
- 53. For example, the Microchip Accused Products do not "rout[e] the first USB signal via the USB multiplexing switches from the USB device to the embedded USB host through the USB bridge and the USB hub."
- 54. Microchip therefore seeks a declaration that it has not infringed, and does not infringe, literally or under the doctrine of equivalents, directly or indirectly, any valid and enforceable claim of the '072 Patent.

TENTH COUNTERCLAIM

(DECLARATORY JUDGMENT OF INVALIDITY) U.S. Patent No. 11,176,072

- 55. Microchip repeats and incorporates by reference Paragraphs 1 through 54 above as though fully set forth herein.
- 56. As a result of at least the allegations contained in the Second Amended Complaint, an actual and justiciable controversy exists between Microchip and Aptiv AG concerning the validity of the '072 Patent. In particular, Aptiv AG alleges that Microchip infringes at least one valid claim of the '072 Patent.

- 57. One or more of the claims of the '072 Patent are invalid for failing to meet the conditions for patentability as set forth in 35 U.S.C. § 1, *et seq.*, including, but not limited to, §§ 101, 102, 103, and 112.
- 58. For example, Bohm (U.S. Patent No. 7,478,191), Chang (U.S. Patent Application Publication No. US2006/0206650), Chang (U.S. Patent Application Publication US2009/0268743), and/or Yamada (Japanese Patent Application Publication No. JP2010093437), alone or in combination with each other, invalidate one or more claims of the '072 Patent, at least under Aptiv AG's apparent construction of the asserted claims.
- 59. Microchip therefore seeks a declaration that one or more of the claims of the '072 Patent are invalid for failing to meet the conditions for patentability as set forth in 35 U.S.C. § 1, et seq.

ELEVENTH COUNTERCLAIM

(DECLARATORY JUDGMENT OF NON-INFRINGEMENT) U.S. Patent No. 11,681,643

- 60. Microchip repeats and incorporates by reference Paragraphs 1 through 59 above as though fully set forth herein.
- 61. As a result of at least the allegations contained in the Second Amended Complaint, an actual and justiciable controversy exists between Microchip and Aptiv AG concerning the infringement of the '643 Patent. In particular, Aptiv AG alleges that Microchip infringes the '643 Patent.
- 62. Microchip has not directly infringed, contributed to, or induced infringement of any valid or enforceable claim of the '643 Patent and has not otherwise committed any acts in violation of 35 U.S.C. § 271.

- 63. For example, the Microchip Accused Products do not "provid[e] a signal detection circuit for receiving USB signals from the consumer USB device via the second USB port."
- 64. Microchip therefore seeks a declaration that it has not infringed, and does not infringe, literally or under the doctrine of equivalents, directly or indirectly, any valid and enforceable claim of the '643 Patent.

TWELFTH COUNTERCLAIM

(DECLARATORY JUDGMENT OF INVALIDITY) U.S. Patent No. 11,681,643

- 65. Microchip repeats and incorporates by reference Paragraphs 1 through 64 above as though fully set forth herein.
- 66. As a result of at least the allegations contained in the Second Amended Complaint, an actual and justiciable controversy exists between Microchip and Aptiv AG concerning the validity of the '643 Patent. In particular, Aptiv AG alleges that Microchip infringes at least one valid claim of the '643 Patent.
- 67. One or more of the claims of the '643 Patent are invalid for failing to meet the conditions for patentability as set forth in 35 U.S.C. § 1, *et seq.*, including, but not limited to, §§ 101, 102, 103, and 112.
- 68. For example, Bohm (U.S. Patent No. 7,478,191), Chang (U.S. Patent Application Publication No. US2006/0206650), Chang (U.S. Patent Application Publication US2009/0268743), and/or Yamada (Japanese Patent Application Publication No. JP2010093437), alone or in combination with each other, invalidate one or more claims of the '643 Patent, at least under Aptiv AG's apparent construction of the asserted claims.

69. Microchip therefore seeks a declaration that one or more of the claims of the '643 Patent are invalid for failing to meet the conditions for patentability as set forth in 35 U.S.C. § 1, et seq.

JURY DEMAND

Microchip demands a trial by jury on all issues raised in its counterclaims that are so triable.

PRAYER FOR RELIEF

WHEREFORE, for its Answer and Counterclaims, Microchip requests the following judgments and relief against Aptiv AG:

- a) That all claims against Microchip be dismissed with prejudice and that all relief requested by Aptiv AG be denied;
- b) A judgment declaring that Microchip has not infringed and does not infringe, either directly or indirectly, any valid claim of the Aptiv Patents, either literally or under the doctrine of equivalents;
- c) A judgment declaring that the claims of the Aptiv Patents are invalid for failure to comply with the statutory provisions of Title 35 of the United States Code including, without limitation, one or more of §§ 101, 102, 103, and/or 112;
- d) An award of Microchip's costs as the prevailing party;
- e) A judgment that this case is exceptional under 35 U.S.C. § 285 and, accordingly, that Microchip is entitled to recover reasonable attorneys' fees and costs upon prevailing in this action;
- f) A judgment and an award of all interest and costs incurred; and
- g) Any award or any such other relief that the Court deems just and proper.

MORRIS, NICHOLS, ARSHT & TUNNELL LLP

/s/ Travis J. Murray

OF COUNSEL:

John M. Neukom Barbara N. Barath Yuqing Cui Alexander H. Lee DEBEVOISE & PLIMPTON LLP 650 California Street San Francisco, CA 94108 (415) 738-5700

Andrew Gish Edward Tulin Ryan K. Iwahashi GISH PLLC 41 Madison Avenue, Floor 31 New York, NY 10010 (212) 518-2000

November 22, 2023

Jack B. Blumenfeld (#1014)
Brian P. Egan (#6227)
Travis J. Murray (#6882)
1201 North Market Street
P.O. Box 1347
Wilmington, DE 19899-1347
(302) 658-9200
jblumenfeld@morrisnichols.com
began@morrisnichols.com
tmurray@morrisnichols.com

Attorneys for Defendant

CERTIFICATE OF SERVICE

I hereby certify that on November 22, 2023, I caused the foregoing to be electronically filed with the Clerk of the Court using CM/ECF, which will send notification of such filing to all registered participants.

I further certify that I caused copies of the foregoing document to be served on November 22, 2023, upon the following in the manner indicated:

Philip A. Rovner, Esquire
Jonathan A. Choa, Esquire
POTTER ANDERSON & CORROON, LLP
1313 North Market Street
Hercules Plaza, 6th Floor
Wilmington, DE 19801
Attorneys for Plaintiff

VIA ELECTRONIC MAIL

Daralyn J. Durie, Esquire
Eric C. Wiener, Esquire
Timothy Saulsbury, Esquire
Joyce C. Li, Esquire
Tannyr Pasvantis, Esquire
Andrew L. Perito, Esquire
MORRISON & FOERSTER LLP
425 Market Street
San Francisco, CA 94105
Attorneys for Plaintiff

VIA ELECTRONIC MAIL

W. Henry Huttinger, Esquire MORRISON & FOERSTER LLP 707 Wilshire Boulevard Los Angeles, CA 90017 Attorneys for Plaintiff VIA ELECTRONIC MAIL

Andrew Jones, Esquire MORRISON & FOERSTER LLP 2100 L Street, NW, Suite 900 Washington, D.C. 20037 Attorneys for Plaintiff VIA ELECTRONIC MAIL

/s/ Travis J. Murray

Travis J. Murray (#6882)